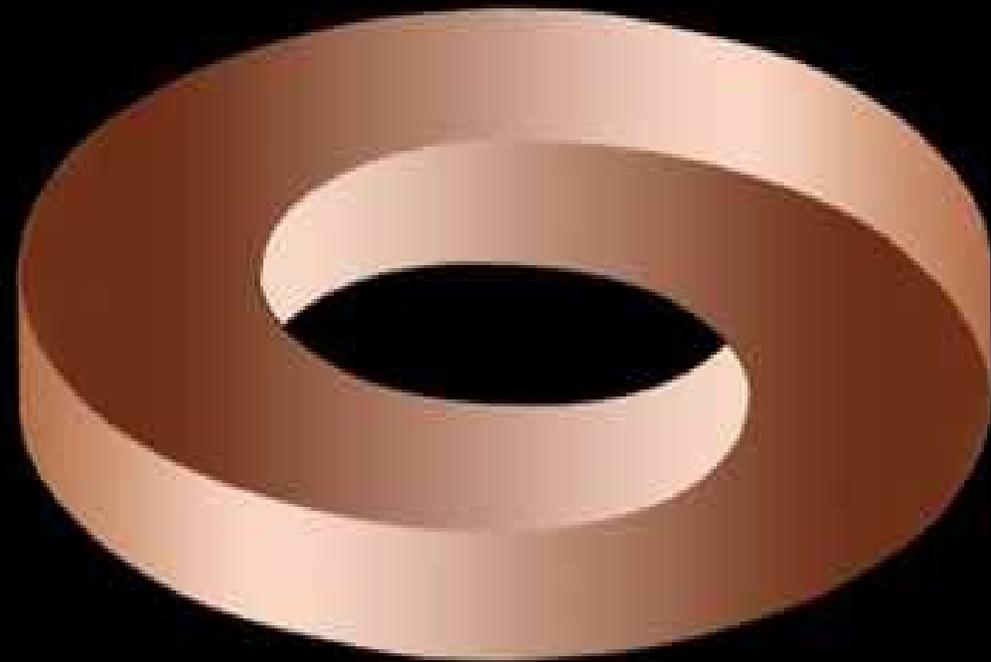




Machine status



Machine Experiments
January 26, 2005



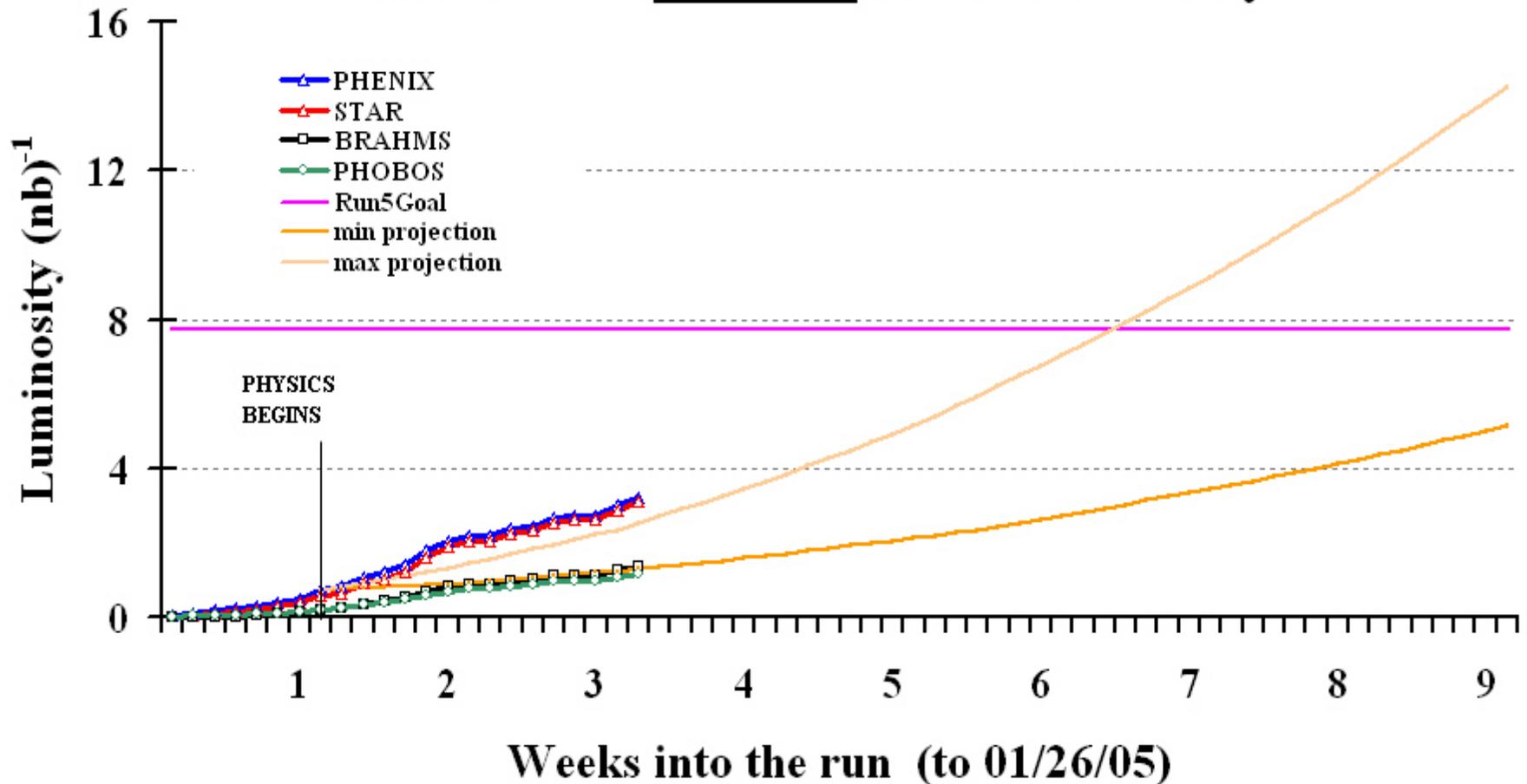


Status – 2 weeks

Total from January 11 (nbarn-1)

Phenix:	2.48
STAR:	2.54
Brahms:	1.10
Phobos:	0.96

RHIC Run 5 Delivered Cu-Cu Luminosity





Week 2 challenges

Access 18+ hours → 1.5-2 days to recover beam operations

Snow storm → beam operations off from owl of Sunday till Monday 7:30pm

assessment of response → plan for future

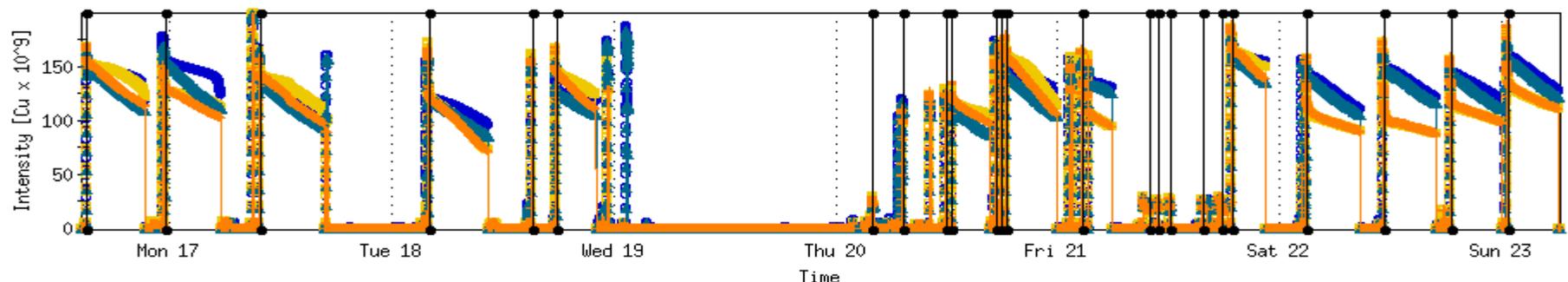
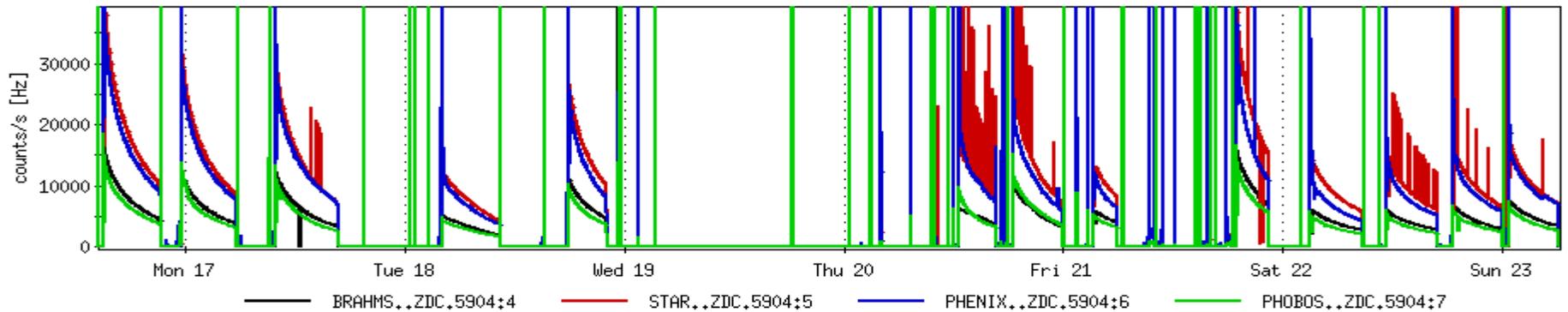
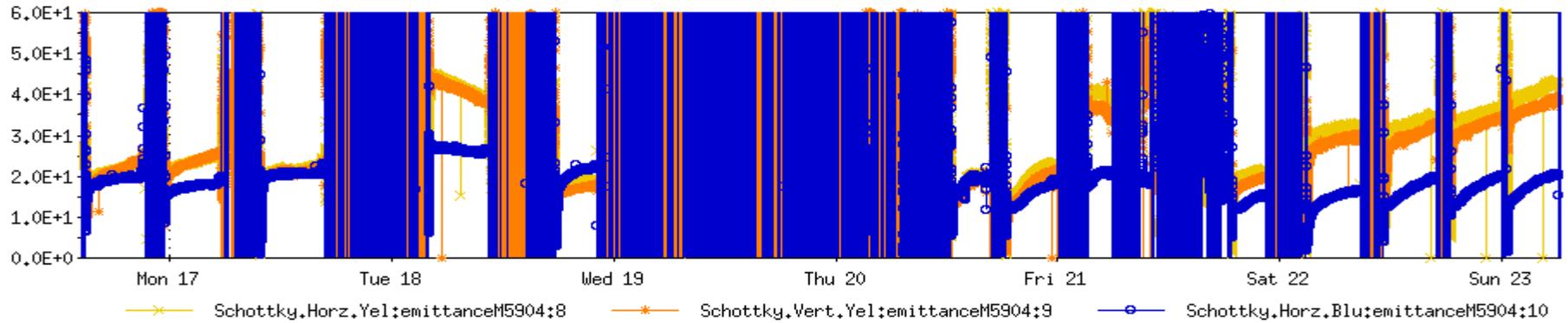
Instability ~0.5sec after transition

→ emittance blow-up, transmission, low rates, background

- Move chromaticity zero crossing early at transition (raise chrom just after transition)
- Work on collimation, background

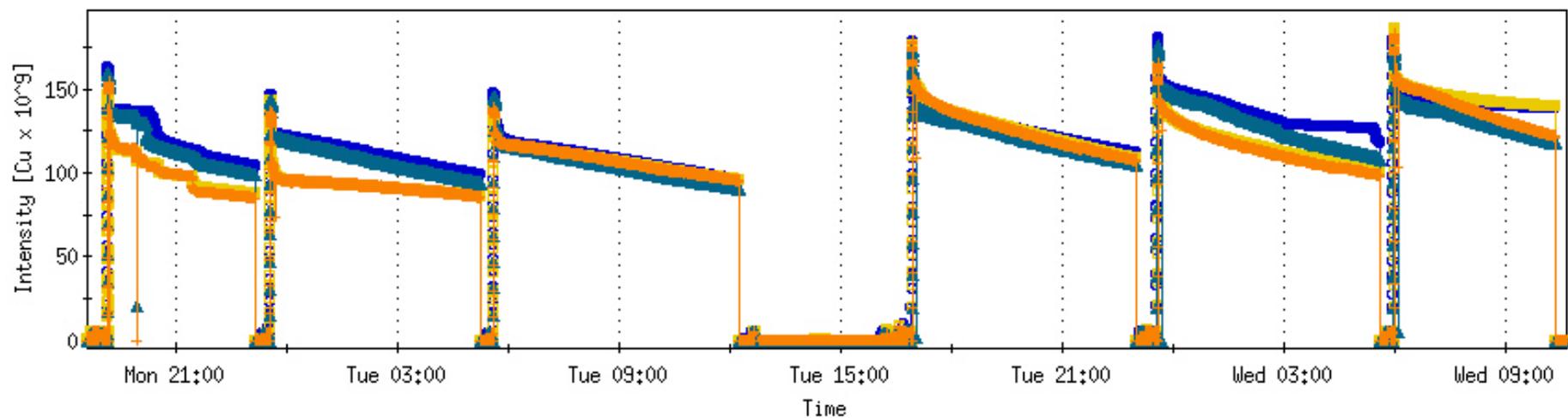
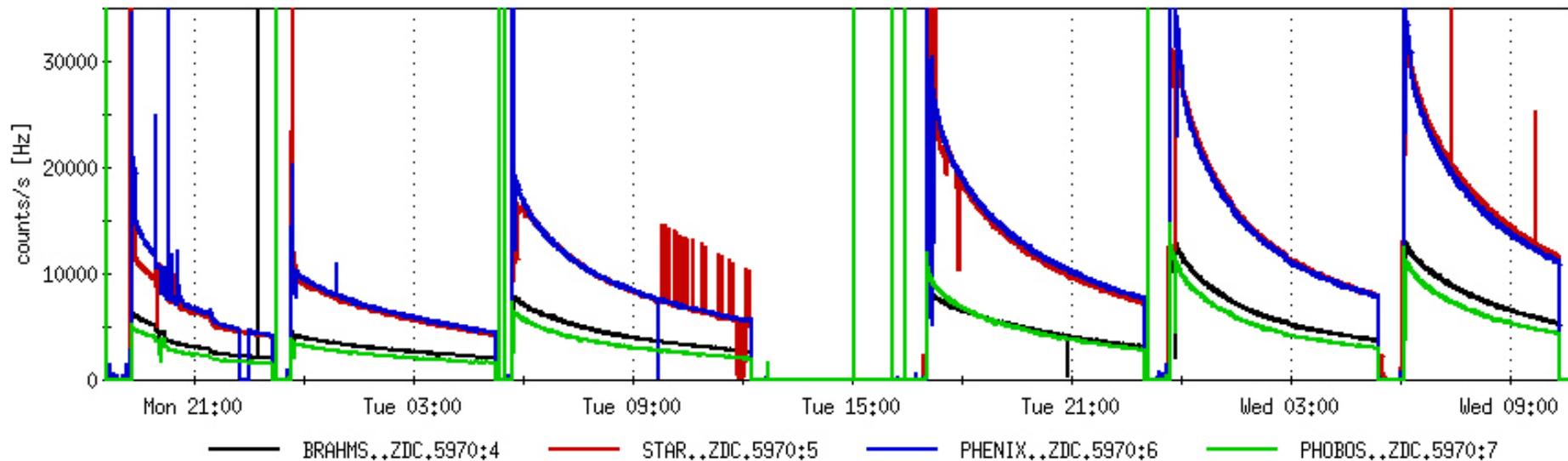


Intensity/collisions – Week 2





Stores after snow storm

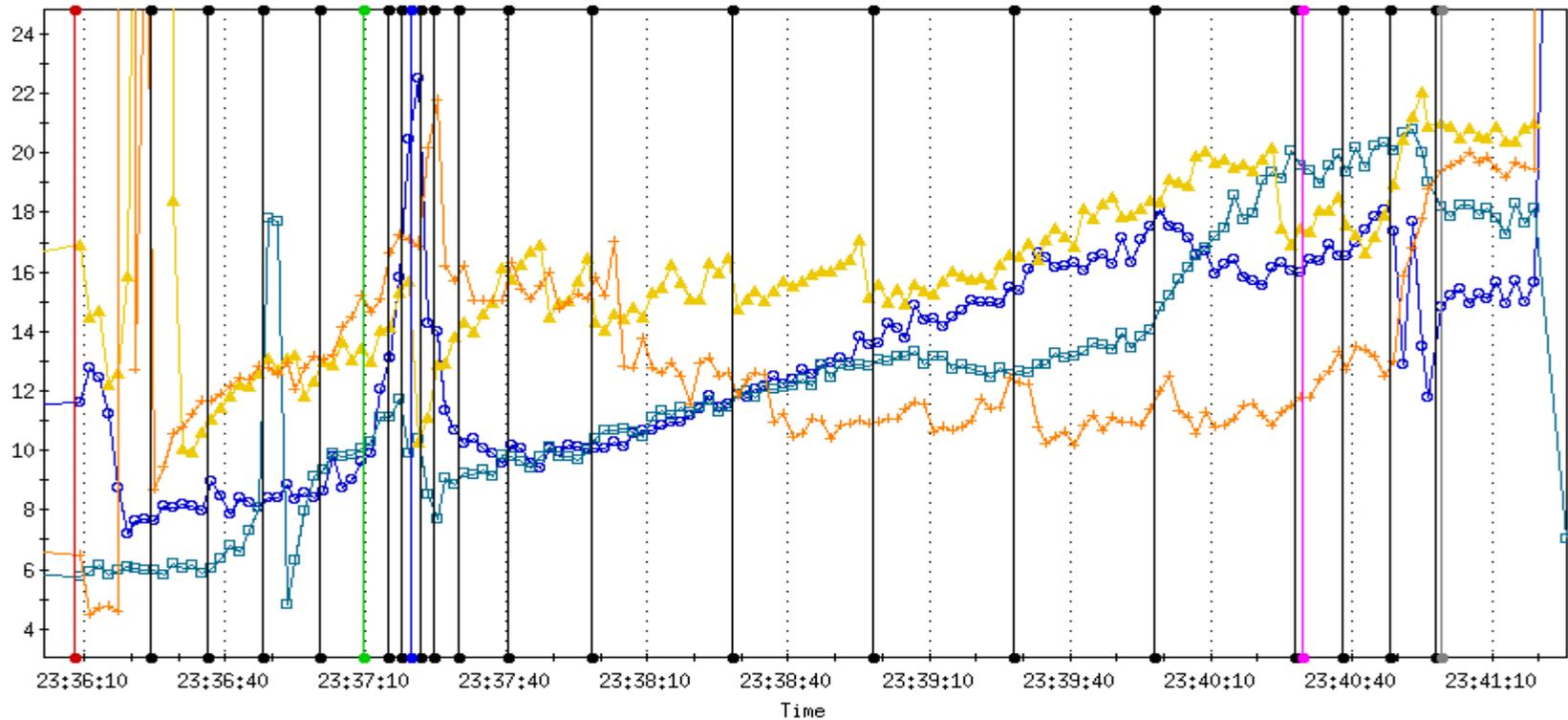




Emittance on the ramp

Tue Jan 25 23:06:46 - Tue Jan 25 23:41:25

Window Event



- RhicIpmManager.blue_horiz;normEmitM[.].5979;4
- △ RhicIpmManager.yellow_horiz;normEmitM[.].5979;6
- ev-accramp
- ev-ygtstart
- △ ev-ygammat
- ev-flattop
- RhicIpmManager.blue_vert;normEmitM[.].5979;5
- △ RhicIpmManager.yellow_vert;normEmitM[.].5979;7
- ev-stone
- ev-bgtstart
- ev-bgammat
- ev-endramp



Work on store luminosity

- ✓ Priority: getting rid of transition instability
- Optimize collimation set-up → automatic collimation
- Automatic LISA steering – 4 experiments

Re-bucketing, common cavities
IR corrections (yellow)

- Increase bunch intensity to $5.5-6e9$
- Increase progressively number of bunches
- Commission ramp for new working point